INDEX TO VOLUME XI

Aaron, A. H., 48. Abbott Laboratories, 511. Abderhalden, Emil, 467. Abderhalden test in diagnosis of pregnancy, 191. Abel, J. J., 22, 24, 26. Abortion, therapeutic, induced by roentgen-ray therapy, Report of 31 cases of, Samuel Stern (abstract), 445. Abramovitch, F., 415, 420. Abramowitsch, F. M., 420. Achalasia of cardia in child of seven years, Case of, W. G. Sears (abstract), 446. Achlorhydria, 11. Achondroplasia, 282, 286, 288, 292. Acids, fatty, X-ray investigation of, 110. Acme International X-ray Co., 511. Acne, eczema, and dermomycosis, Roentgentherapy of, O. B. Chandler (abstract), 262. Actinomycosis, Radiotherapy in, A. U. Desjardins, Adair, Frank, 438, 507. Adam, 108, 114. Adami, J. G., 313, 467. Adler, 236, 238. Agfa Ansco Corporation, 426. Air passages, anterior, Clinical remarks on use of surgical diathermy for malignant tumors in, E. Schmiegelow (abstract), 176. Alajouanine, 488. Albee, Fred H., Autogenous bone graft in spondylolisthesis, 340. Alberti, 390. Aldridge, A. H., 117. Algyogyi, 216. Alius, H. J., 267. Allen, 85. Allen, D. M., 47. Allison, R. G., 318, 319. Alloys, X-ray study of, 101 et seq. Altschul, Walter, 100. Alvarez, Walter C., 408. American Association of Radiological Technicians, American College of Radiology, 159, 432, 433. American College of Surgeons, 352, 353, 379. American Institute of Electrical Engineers, 157. American Medical Association, Section on Radiology, 159. American Radium Society, 159.
American Roentgen Ray Society, 432, 447.
American Society for Control of Cancer, 379.
Ameuille, P., 420.
Amyl nitrite, Use of, as anti-spasmodic in roentgen examination of gastro-intestinal tract, G. Holmes and R. Dresser (abstract), 280. Anderson, Arnold S., 172. Anderson, William T., Jr., 437, 508. Anemia, pernicious, 9-11. Angina pectoris, nervous or spastic, 195. Annual Meeting, Chicago, 88, 161, 255-257, 354-356, 431, 437-440, 503-509. Apolant, H., 394, 401. Appendicitis, 258, 279. Archibald, E., 413, 420. Arens, Robert A., 118, 124, 262, 263, 267, 355, 360, 445, 452. Armand-Delille, P., 415, 420. Arnold, B. H., 346. Arnold, L., 369. Arnstam, 122, 125.

Arrhenius, 390. Arthritis, infectious, 10, 11. Artos, Sister Mary, 82. Asahara, 114. Aschoff, Ludwig, 330. Ashbury, Howard E., Askanazy, M., 321, 330.
Askanazy, Joseph, Results of oral method in chole cystography, 99.
Astbury, 111, 112, 114. Athletics, ultra-violet radiation in, Present status of W. Hering (abstract), 442.

Atsatt, 316, 317.

Aub, J. C., 254.

"Automatin" and radiation in double heart experiment, H. Zwaardemaker (abstract), 266. Aviator's heart, 463. Azoulay, 415, 421. Babinski, J., 481, 486, 488, 489. "Back-scattering," 280. Barnard, 389.
Barnes, John M., 77, 85-87, 141, 254, 255, 439, 509.
Barry, M. W., 439, 509.
Barth, 315.
Basel Barth, 313.

Basal metabolism in chronic lymphatic leukemia,
C. I. Krantz and M. C. Riddle (abstract), 444.

Basedow's disease, Roentgenotherapy of, P. Krause (abstract), 239.

Bashford, E. F., 394, 398, 401.

Bass, F., 444.

Baths. See Balneotherapy.

[Paths] Fruthera and pigmentation modification of [Baths] Erythema and pigmentation, modification of, by external factors, Investigations regarding, R. Stahl and G. Simsch (abstract), 262. Stahl and G. Simsch (abstract), 262
Bauer, W., 254.
von Bayer, 22, 24, 26.
Bayne-Jones, S., 412, 422.
Beadles, C. F., 313.
Beals, John A., 440, 507.
Beck, C., 16, 17, 21, 24-26, 37, 44, 67, 68.
Beck, Edgar C., 48.
Beck, Emil, 509.
Beck, O., 415, 420.
Becker, Theodor, 134, 140.
Béclère, A., 116, 232, 233, 238, 351, 352.
Béclère, H., 22, 26.
Becquerel, 434.
Behnken, 87. Bedniken, 434.
Behnken, 87.
Belden, Webster W., 281-314, 320, 439, 505.
Belden, Webster W., Bone diseases (original paper), 281. See other references.

INDEX TO VOLUME XI

Aaron, A. H., 48. Abbott Laboratories, 511. Abderhalden, Emil, 467. Abderhalden test in diagnosis of pregnancy, 191. Abel, J. J., 22, 24, 26. Abortion, therapeutic, induced by roentgen-ray therapy, Report of 31 cases of, Samuel Stern (abstract), 445. Abramovitch, F., 415, 420. Abramowitsch, F. M., 420. Achalasia of cardia in child of seven years, Case of, W. G. Sears (abstract), 446. Achlorhydria, 11. Achondroplasia, 282, 286, 288, 292. Acids, fatty, X-ray investigation of, 110. Acme International X-ray Co., 511. Acne, eczema, and dermomycosis, Roentgentherapy of, O. B. Chandler (abstract), 262. Actinomycosis, Radiotherapy in, A. U. Desjardins, Adair, Frank, 438, 507. Adam, 108, 114. Adami, J. G., 313, 467. Adler, 236, 238. Agfa Ansco Corporation, 426. Air passages, anterior, Clinical remarks on use of surgical diathermy for malignant tumors in, E. Schmiegelow (abstract), 176. Alajouanine, 488. Albee, Fred H., Autogenous bone graft in spondylolisthesis, 340. Alberti, 390. Aldridge, A. H., 117. Algyogyi, 216. Alius, H. J., 267. Allen, 85. Allen, D. M., 47. Allison, R. G., 318, 319. Alloys, X-ray study of, 101 et seq. Altschul, Walter, 100. Alvarez, Walter C., 408. American Association of Radiological Technicians, American College of Radiology, 159, 432, 433. American College of Surgeons, 352, 353, 379. American Institute of Electrical Engineers, 157. American Medical Association, Section on Radiology, 159. American Radium Society, 159.
American Roentgen Ray Society, 432, 447.
American Society for Control of Cancer, 379.
Ameuille, P., 420.
Amyl nitrite, Use of, as anti-spasmodic in roentgen examination of gastro-intestinal tract, G. Holmes and R. Dresser (abstract), 280. Anderson, Arnold S., 172. Anderson, William T., Jr., 437, 508. Anemia, pernicious, 9-11. Angina pectoris, nervous or spastic, 195. Annual Meeting, Chicago, 88, 161, 255-257, 354-356, 431, 437-440, 503-509. Apolant, H., 394, 401. Appendicitis, 258, 279. Archibald, E., 413, 420. Arens, Robert A., 118, 124, 262, 263, 267, 355, 360, 445, 452. Armand-Delille, P., 415, 420. Arnold, B. H., 346. Arnold, L., 369. Arnstam, 122, 125.

Arrhenius, 390. Arthritis, infectious, 10, 11. Artos, Sister Mary, 82. Asahara, 114. Aschoff, Ludwig, 330. Ashbury, Howard E., Askanazy, M., 321, 330.
Askanazy, Joseph, Results of oral method in chole cystography, 99.
Astbury, 111, 112, 114. Athletics, ultra-violet radiation in, Present status of W. Hering (abstract), 442.

Atsatt, 316, 317.

Aub, J. C., 254.

"Automatin" and radiation in double heart experiment, H. Zwaardemaker (abstract), 266. Aviator's heart, 463. Azoulay, 415, 421. Babinski, J., 481, 486, 488, 489. "Back-scattering," 280. Barnard, 389.
Barnes, John M., 77, 85-87, 141, 254, 255, 439, 509.
Barry, M. W., 439, 509.
Barth, 315.
Basel Barth, 313.

Basal metabolism in chronic lymphatic leukemia,
C. I. Krantz and M. C. Riddle (abstract), 444.

Basedow's disease, Roentgenotherapy of, P. Krause (abstract), 239.

Bashford, E. F., 394, 398, 401.

Bass, F., 444.

Baths. See Balneotherapy.

[Paths] Fruthera and pigmentation modification of [Baths] Erythema and pigmentation, modification of, by external factors, Investigations regarding, R. Stahl and G. Simsch (abstract), 262. Stahl and G. Simsch (abstract), 262
Bauer, W., 254.
von Bayer, 22, 24, 26.
Bayne-Jones, S., 412, 422.
Beadles, C. F., 313.
Beals, John A., 440, 507.
Beck, C., 16, 17, 21, 24-26, 37, 44, 67, 68.
Beck, Edgar C., 48.
Beck, Emil, 509.
Beck, O., 415, 420.
Becker, Theodor, 134, 140.
Béclère, A., 116, 232, 233, 238, 351, 352.
Béclère, H., 22, 26.
Becquerel, 434.
Behnken, 87. Bedniken, 434.
Behnken, 87.
Belden, Webster W., 281-314, 320, 439, 505.
Belden, Webster W., Bone diseases (original paper), 281. See other references.

Bell, Blair, 391, 404, 407.
Bell, Miss Mary E., 82.
Bendick, A. J., 120, 124.
Beneke (1859), 195.
Benson, A. L., 159.
Benzene series, X-ray study of, 112.
von Bergen, 323, 330.
Berkeley, 405, 406.
Bernal, 114.
Bernard, 415, 421.
Bernstein, M. A., 315, 440, 506.
Berven, E., 348, 351.
Berzelius, 468.
Besançon, 415, 421.
Bevan, A. D., 18, 25, 323.
Bierich, Robert, 406.
Biliary tract, Development of roentg

Biliary tract, Development of roentgenologic examination of, C. C. McCoy, 13.
Binet, L., 481, 489.
Biological action of radiation, Mechanical explana-

tion of, Samuel Brown, 466. Biology of ultra-violet light (Communication IV.— Reaction of human skin to repeated exposure to ultra-violet rays—light protection), L. Schall and H. J. Alius (abstract), 267.

Biopsy, 144.
Birkett, G. E., 358.
Bischoff (Santa Barbara), 407.
Black, J. A., 26.
Bladder and prostate, tumors, radium application,

Bladder, cancer of, Modern methods of treatment and results in, B. Lewis and G. Carroll (ab-

and results in, B. Lewis and G. stract), 442.
Blaine, E. S., 211, 440, 509.
Blankenhorn, M. A., 333, 337.
Bliss, G. D., 159.
Block, Frank B., 406.
[Blood] circulation, mechanics of, 196.

Blood and its components, plasma and serum, Quantitative measurements in visible and ultraviolet absorption spectrum of, R. Suhrmann and W. Kollath (abstract), 172.

W. Kollath (abstract), 172.

Blood pressure, high, Consideration of, due to small lungs, W. Lintz (reviewed), 166.

Blood sugar, effect of roentgen rays upon, Experimental study regarding analysis of phenomenon of. (Regarding point of attack of roentgen-ray effect on biological object.) J. Rother (abstract)

(abstract), 314.
Blood vessel visualization, J. B. Carnett and S. G. Greenbaum (abstract), 260.
Bloodgood, Joseph C., 79, 81, 82, 282, 286, 287, 313, 440, 509.

Bloomfield, A. L., 26. Bloor, W. R., 47. Blumenfeldt, 245.

Bobbs, of Indianapolis, 14, 22, 24. Bobrie, J., 242, 249. Bodenstab, W. H., 43. Bodle, Claude J., 82. Bolton, Charles, 269, 453, 457.

Bone cavities: roentgenologic study, E. G. Stoloff (abstract), 90.

Bone changes in leprosy, Ralph Hopkins, 470.

Bone diseases, Webster W. Belden, 281.

Bone, endothelioma of, 237.

Bones of face, Fractures of, P. F. Titterington, 207. Bone graft, Autogenous, in spondylolisthesis, Fred H. Albee, 340.

Bone and joint lesions, Importance of radiographing, C. A. Plume (abstract), 179.

Bone metastasis in thyroid tumors: early diagnosis and radiotherapy, S. Ginsburg (abstract), 177.

Bone tumors, See under Tumors, bone.

Bonn, University of, 264. Bonney, Victor, 117, 405, 406.

Book reviews-Einstellung zur Röntgenologie. Eine Untersu-chung uber die Einfugung der Röntgen-strahlen-anwendung in Praxis, G. Holzknecht, 161. International Clinics, 37th Series, IV, Dec., 1927,

164.

Grenzen des Normalen und Anfange des Pathologischen im Röntgenbilde, Alban Köhler,

Röntgendiagnostik der Erkrankungen innerer Organe in Tabellenform, E. Markovits, 169.

Ergebnisse der medizinischen Strahlenforschung Ergebnisse der medizinischen Stranienforschung (Röntgendiagnostik, Röntgen-, Radium-, und Lichttherapie). Herausgegeben von H. Holfelder, H. Holthusen, O. Jüngling, und H. Martius, 257.

Archives de l'Institut du Radium de l'Universite de Paris et de la Fondation Curie, Claude Regaud and A. Lacassagne 258

de l'aris et de la Fondation Curie, Claude Regaud and A. Lacassagne, 258. Elements de la Physique des Rayons X. Intro-duction à la Radiologie Medicale et à l'Etude Generale des Rayonnements, F. Wolfers, 441. Handbuch der gesamten Strahlenheilkunde, Bi-ologie, Pathologie und Therapie, edited by P. Lazarus, 441. New York Academy of Medicine Lectures on Medicine and Surgery 441

P. Lazarus, 441.

New York Academy of Medicine Lectures on Medicine and Surgery, 441.

Borderline ray erythema, Studies of histology of, H. G. Rottmann (abstract), 179.

Borderline ray. See also Bucky's borderline ray.

Borst (Munich), 150.

Boston Medical and Surgical Journal, 155.

Bouchet, M., 415, 421.

Bouwers, Albert, 439, 503.

Bovie, William T., 437, 438, 505, 508, 509.

Bowen, 207.

Bowen, 207.

Bowen, David R., 171.

Bowing, Harry H., 159, 437, 438, 504.

Bowlby, A. J., 313.

Bowlby, A. J., 313.

Bowden, E. A., 45, 47, 84, 273, 279.

Boyden meal, 45, 48, 273.

Brady, Geo. W., & Co., 511.

Braestrup, Carl B., 72.

Bragg, W. L., 114.

Bragg, W. L., 114.

Brailsford, J. F., 17, 25, 176.

Brain tumors, Experience in treatment of, by irradiation during past 13 years, H. K. Pancoast (abstract), 360. diation during past 13 years, H. K. Pancoast (abstract), 360.

Brauer (Hamburg), 257.
Britesun, Inc., 511.
Broders, A. C., 233, 238, 388, 403, 408.
de Broglie, W., 428.
Bronchiectasis, 413 et seq., 461.

Bronchitis, fetid spirillar, 333.

Bronchography according to passive technic; method of choice for roentgenologist, Alton Ochsner,

Bronchography, indications for, 413.

Bronchography: introduction of iodized oil into tracheobronchial tree by "passive" method, Al-ton Ochsner and Wellwood Nesbit (abstract), 452.

Broome, 112, 114.
Brown, H. F. R., 190.
Brown, Samuel, 411, 439, 466-469, 504.
Brown, Samuel, Mechanical explanation of biological action of radiation (original paper), 466.

See other references. Brunzel, H. F., 323. Buck X-Ograph Co., 511.

Bucky, Gustav, 503.

Bucky's borderline rays, Regarding treatment of skin diseases with, H. Fuhs (abstract), 176.

Budapest, University of, clinic, 261.

Bumm, E., 151, 405, 406.

Burby, John J., 439, 509.

Burckhardt, H., 23, 24, 26.

Burgheim, F., 263.

Burnam, Curtis F., 159, 406.

Burrows, Montrose T., Jorstad, Louis H., and Ernst, Edwin C., Chemical and biological changes induced by X-rays in body tissues (original paper), 370. per), 370. Buxbaum (Karlsbad), 67, 68.

Byrne (Brooklyn), 403.

Cadmium cell and electrometer, Ultra-violet meas urements with, A. Rüttenauer (abstract), 261.

Calcifications, Intracranial, J. T. Murphy, 213. Calcium metabolism, disturbance of, 281, 286. Calculi, first presentation of, in living, 16. See also Gallstones.

[Calculi] Stones in prostates and seminal vesicles, J. L. White (abstract), 228.

Calculi, urinary, Unusual: with case reports, W. E. Stevens (abstract), 100.

Caldwell, 409. Caldwell, E. W., 19, 24, 25. Caldwell, G. H., 508.

California, University of, infirmary, 175. Cameron, W. H., 478.

Cameron, W. H., 478. Cameron's Surgical Specialty Co., 511. Camp, John D., 22, 24, 25, 44, 160. Cancer, symposium on, 361-408.

Advanced—experiences in treatment with colloi-dal lead, A. Soiland, W. E. Costolow, and O. N. Meland (abstract), 265.

of bladder, Modern methods of treatment and results in, B. Lewis and G. Carroll (abstract), 442.

of esophagus, X-ray diagnosis of, P. M. Hickey

(abstract), 178.
[of uterus] Uterine: is outlook better for patient? W. P. Healy (abstract), 175.
of uterus, Radiation therapy of, D. den Hoed

(abstract), 260.

Cancer. See also Carcinoma, Tumor, Malignancy, Neoplasm.

Cancer. See under Chemical and biological changes induced by X-rays in body tissues, M. T. Burrows, L. H. Jorstad, and E. C. Ernst, 370. Cancer, American Society for Control of, 379. Cancer biology and radiation, F. C. Wood, 388

Cancer cell in practice of medicine, W. C. Mac-Carty, 379.

Cancer, International Conference for Control of, 379. Cancer, radium therapy in, Experimental basis of, S. Russ (abstract), 268.

Cancer Research, Institute for, Amsterdam, 260.

Cancer, Strasbourg Congress on, 398. Cancer tissues, Direct and indirect action of radiation on, A. Lacassagne, 393.

Cancer treatment at Radiumhemmet, Stockholm, 142, 188, 350, 500, 501.
Canti, R. G., 505.
Capette, J., 188, 190.
Capon, N. B., 245, 249.

Carcinoma of esophagus: report of 50 cases, J. Sher-

man (abstract), 178. of female generative organs following radiation therapy, Permanent results in cases of, F. Gál (abstract), 261.

of lip, 239. of lip, saturation method of radiation for, 185. of lung (parenchymal type), primary, Roentgenological manifestations of, B. R. Kirklin and R. Paterson (abstract), 443.

of mouth and tongue, Radium treatment of, G. E. Birkett (abstract), 358.

of skin, 239. of stomach, 345.

stomach rupturing through diaphragm, 130.

of thyroid, 236.

saturation method of radiation used of tongue, for, 186.

of uterine cervix, H. Schmitz (abstract), 179 of uterine cervix, Pregnancy complicated by, William Neill, Jr., 429.
of uterine cervix, Prognostic value of histological

malignancy index and clinical grouping of, Henry Schmitz and William Hueper, 361.

of [uterus] cervix, Review of various methods of treatment of: attendant primary mortality and 5-year cures, Maurice J. Gelpi, 403. [of uterus] uterine, radiation therapy of, Results of, E. H. Zweifel (abstract), 171.

Carcinoma, beta rays, Influence of, on, L. F. Loeb and Marie Wreschner (abstract), 228.

Carcinoma. See also Cancer, Tumor, Malignancy, Neoplasm.

Cardiac insufficiency, 194.

Cardiograph, Roentgen-ray, S. Katzman, 134.
Cardiovascular system, Physiotherapeutics of diseases of F. M. Groedel, 194.

Carey Drug Dispensary, Denver, 58. Carman, R. D., 19, 21, 22, 24, 25, 40, 44, 288. Carnett, John B., 260. Caroline Medical-surgical Institute, Stockholm, 498, 501.

Carrel, A., 389.

Carrel, A., 389.

Carroll, Grayson, 442.
Carson, H. W., 167.

Cartilage, basal celled epithelioma involving, Deep X-ray therapy of, H. Flecker (abstract), 267.

Cary, William H., 115, 116, 124.

Case, James T., 1, 17, 18, 20, 21, 24-26, 28, 44, 67-69, 159, 439, 451, 453, 457, 508.

Case, James T., Some pseudo-vesicular shadows and other pitfalls in gall-bladder roentgenology.

case, James 1., Some pseudo-vesicular shadows and other pitfalls in gall-bladder roentgenology (original paper), 1. See other references.

Casellas, P. R., 439, 504.

Caspari, W., 394, 398, 401.

Cassidy, W. J., 508.

Castellani, A., 333, 337.

Castration does of

Castration dose of roentgen rays, Effect of, upon rabbit ovary: experimental study with clinical evaluation of problem of ovarian radiation, M. R. Robinson (abstract), 140.

Cathode ray tube, 157. Cattell, H. W., 16, 25. Caussade, G., 416, 421. Cavities, bone. See under Bone.

Cedercreutz, Axel, 262. Cervix, See Uterus; also Cancer of Uterus and Carcinoma of Uterus.

Cesbron, 151. Chamberiain, E. N., 245, 249. Chamberlain, W. E., 77, 135, 140. Chambers, H., 394-396, 401, 402. Chance's U. V. glass, 443.

Chandler, 44. Chandler, Orville B., 262.

Chemical and biological changes induced by X-rays in body tissues, M. T. Burrows, L. H. Jorstad, and E. C. Ernst, 370.

Chest diseases, Value of synchronization in accurate diagnosis of, F. M. McPhedran and C. N. Weyl, 458.

Chest examination, X-ray, 251, 496.

Chest wounds, 130.

Chest. See also Lungs and Tuberculosis. Chicago X-ray Film & Mount Co., 511. Chick, 390.

Childhood, Congenital abnormalities of urinary tract in, H. F. Helmholz (abstract), 264.
Cholecystitis, 277, 496.
Cholecystographic response, Normal, B. R. Kirk-

lin, 34. Cholecystography, 1-71, 83, 84, 91-100, 252, 253, 258, 271-280, 496. See also Biliary tract, and Gra-

ham test.

ham test.
Cholecystography, R. G. Van Nuys (abstract), 177.
Cholecystography: analysis of 1,500 cholecystographic examinations with correlated clinical and laboratory findings, with special reference to pernicious anemia, myocardial degeneration, infectious arthritis and gastric acid content.

I. H. Lockwood and E. H. Skinner, 7.
Cholecystography, and beginn media. Correlation of

Cholecystography and barium meal, Correlation of, C. S. Oakman, 27.
Cholecystography in late months of pregnancy, L. Levyn, E. C. Beck and A. H. Aaron, 48, 67. Cholecystography, Present status of (editorial), W. H. Cole, 83, 84.

Cholecystography, Results of oral method in, Joseph Aspray, 99.

Cholecystography, Routine, with report of 625 cases. W. W. Watkins and H. P. Mills, 91.

Chondrodysplasia, hereditary deforming, 282, 286,

Christie, A. C., 159. Christophe (Liege), 487. Church, Archibald, 216. Ciba Company, 489. Circulation, mechanics of, 196. Clairmont, 345. Circulation, mechanics of, 196.
Clairmont, 345.
Clark, 114.
Clark (New Orleans), 404.
Clark, G. L., 427.
Clark, John G., 405, 406.
Clark, S. M. D., 403, 405, 406.
Clerc, A., 242, 249.
Clerf, L. H., 413, 416, 421.
Clutton, H. H., 313.
Cobalt, X-ray study of, 103.
Cobb, Farrar, 405, 406.
Coffey, Robert C., 406.
Cohen, 39.
Cohn, Alfred, 264.
Cohnheim, 177.
Cole, Albert M., 160.
Cole, Lewis Gregory, 17, 18, 20, 25, 28, 37, 274, 279, 285, 286, 319, 320, 440.
Cole, Warren H., 7, 11, 22, 24, 26, 44, 45, 56, 66, 83, 84, 271, 279, 437. See also Graham test.
Colebrook, Dora C., 269.
Collargol injection and X-rays, 115, 116.
Collenberg, Henry T., 82.
Colon, Pathologic: recent studies, J. W. Draper and R. K. Lohnson (abstract), 173.

Colon, Pathologic: recent studies, J. W. Draper and R. K. Johnson (abstract), 173. "Colsil," 263.

Columbia University, Institute of Cancer Research

of, 230.
Colvin, A. R., 315, 319.
Compton, Arthur H., 438, 505, 507.
Compton effect, 280.
Contamin, A., 394, 401.
Conyers, Chester A., 56, 68.
Cook, C. E., 440, 509.
Coolidge process (tungsten wire), 101.
Coolidge, W. D., 157, 158, 438, 463.
Cooper & Cooper, Inc., 511.
Copher, Glover H., 7, 11, 279, 437. See also Graham test. ham test.

Cordua, 236, 238. Cori, C. F., and G. T., 388. Corson, Eugene R., 82. Costolow, William E., 90, 159, 265.

Costolow, William E., 90, 159, 265.
Cotte, 116.
Cottenot, P., 414, 421.
Cotton, Frederic J., 353.
Couret, Maurice, 404.
Coutard, 140, 151.
Cramer, W., 394, 398, 401.
Crandall, L. A., 509.
Crane, A. W., 18, 25, 205, 447-452, 508.
Crane, A. W., Extra-abdominal affections giving gastro-intestinal symptoms, with special reference to Ménière syndrome (original paper).

gastro-intestinal symptoms, with special reference to Ménière syndrome (original paper), 447. See other references.

Crocker Laboratory, 390.

Crockett, R. H., 331.

Cron, R. S., 117, 124.

Crookes, Sir William, 13, 24.

Crutchfield, E. D., 439, 508. Crutchfield, E. D., 439, 508.
Crystals, X-ray study of, 101 et seq.
Cullen, 235.
Cullen, Thomas S., 4-6.
Curie Institute, Paris, 188.
Curie, Marie and Pierre, 434.
Curtis, A. H., 119, 125.
Cushway, Bertram C., 177, 440, 443, 446.
Cutler, M., 234, 239.
Cystocele, J. B. Banister (abstract), 166.
Cystography as aid to diagnosis of pelvic.

Cystography as aid to diagnosis of pelvic lesions in female, S. A. Robins (abstract), 172.

DaCosta, J. C., 207, 284, 313.
D'Amato (Hamburg), 258.
Danby, W. E., 216.
Danforth, W. C., 439, 505.
Danielsson, E., 414, 421.
Darbois, 416, 420, 421.
Dartigues, 115, 124.
Davies, Rose & Co., Ltd., 511.
Davies, Rose & Co., Ltd., 511.
Davis, Lincoln, 405, 406.
Death during roentgen-ray treatment because of lung embolism, E. Saupe (abstract), 357.
Deaver, John, 29.
Debye, 114.
De Martel, 487.
den Hoed, D., 260.
Denis, Willy, 45.
Denny, Oswald E., 472.
Denver, University of, Electrical Engineering Denatory (120).

Denny, Oswald E., 4/2.

Denver, University of, Electrical Engineering Department, 134, 139.

[Dermatology] Lichen planus, Local, caused by X-raying lichen planus patient, A. Cedercreutz (abstract), 262.

[Dermatology] Roentgentherapy of acne, eczema, and dermomycosis, O. B. Chandler (abstract), 262.

Dermatoses, Pre-cancerous, G. M. MacKee and G.

M. Lewis (abstract), 180.

Dermomycosis, acne, and eczema, Roentgentherapy of, O. B. Chandler (abstract), 262.

Desjardins, A. U., 253, 321-332, 353, 437, 464, 465,

Desjardins, A. U., Radiotherapy in actinomycosis (original paper), 321. See other references. Dessauer Electroscope, 76.

Dessauer, Friedrich, 439, 503.

Determann, A., 77.

DeWitt, C. H., 178.

Dextrocardia and their diagnostics, on various types of, S. A. Reinberg and M. E. Mandelstam, 240. Diagnosis, 7.

Diagnosis, Roentgenology, handmaid of (editorial), E. L. Fisk, 153.

Diathermy in gynecology, 258.

Diathermy, surgical, for malignant tumors in anterior air passages, Clinical remarks on use of, E. Schmiegelow (abstract), 176. Dieterich, Hans, 212.

Dillon, 257.

Dimier, 115, 124.

Diverticula of thoracic esophagus, L. A. Smith (abstract), 357.

Dock, William, 135, 140.

Dock, William, 135, 140.

Docderlein, 405.

Donzelot, 242, 249.

Dorland, W. A. N., 437, 504.

Dorno, 261, 441 (incorrectly spelled Dorne).

Dosage with Sabouraud tablet from viewpoint of half value layer in aluminum, V. Wucherpfennig

(abstract), 360. Douay, Eugene, 115-117, 124. Doub, Howard P., 125, 172, 173, 179, 193, 333, 440,

Doub, Howard P., Fuso-spirochetal pulmonary gan-grene (original paper), 333. See other ref-

erences. Draper, J. W., 173. Dresser, Richard, 280.

Drinking water from European springs, 200. Drips, Della G., 437, 505. Duane, William, 77, 85, 87, 511.

Duhamel, G., 420. Dulong, 468.

Duncan, Rex, 405. Dunham, H. K., 87, 509. Dunlap, H. F., 254.

Duodenal contents, Observations on movements of, with special reference to anti-peristalsis a pyloric regurgitation, R. W. A. Salmond, 453.

Duodenal stenosis, Intermittent, R. Hayes and A. B. Shaw (abstract), 357. Duval, P., 22, 26.

Dwyer, Maurice F., 439, 508.

Eastman Kodak Company, 511. Echinococcosis of lungs, 258.

Eckelt, 142, 151.

Eczema, acne and dermomycosis, Roentgentherapy of, O. B. Chandler (abstract), 262.

Edling, Lars, 348.

Education in medical radiology, with reference especially to experience gained in Sweden, Gösta Forssell, 497.

Eisendrath, Daniel N., 509. Eisler, Fritz, 120, 122, 125. Ekerlund (Stockholm), 348.

"Electricity is dangerous" (editorial), E. L. Jenkinson, 431.

Electrometer and cadmium cell, Ultra-violet measurements with, A. Rüttenauer (abstract), 261. Eller, Joseph J., 77. Ellingsen, Mr. (Bennet tour), 347.

Ellis, 313.

Emmerson, Louis L., 507.
Empyema, Post-pneumonic interlobar, G. W. Norris and D. R. Bowen (abstract), 171.
Endocrine dysfunction, 290; see also Glands, duct-

less.

Endothelioma of bone, 237.

Engelmann, 117.

Engeln Electric Company, 511.

Epiphysitis of head of femur, 289.

Epithelioma involving cartilage, basal celled, Deep X-ray therapy of, H. Flecker (abstract), 267. Ernst, Edwin C., 159, 160, 349, 370, 503, 509, 511.

Ernst, Edwin C., Burrows, Montrose T., and Jorstad, Louis H., Chemical and biological changes induced by X-rays in body tissues (original paper), 370. See other references.

Erskine, Arthur W., 159.

Fo Fo

FIFFFFFFFF

VFFFFFFFF

Erythema and pigmentation, modification of, by ex-ternal factors, Investigations regarding, R. Stahl and G. Simsch (abstract), 262 Escudero, P., 413, 421.

Esophagus, cancer of, X-ray diagnosis of, P. M. Hickey (abstract), 178.

Esophagus, Carcinoma of: report of 50 cases, J. Sherman (abstract), 178.

Esophagus, thoracic, Diverticula of, L. A. Smith

(abstract), 357. Esophagus, X-ray study of, 257. Ether, first administration of, 353.

European spas and analysis of waters, I' Eusterman, George B., 274, 277, 279, 280. Evans, E., 439, 506. Evans, James A., 439. Evans, M. J., 395, 402. Ewald meal, 9.

Ewing, James, 190, 233, 237, 238, 438, 507.
Ewing's tumor—endothelial myeloma, L. K. Sycamore and G. W. Holmes (abstract), 171.

Exostoses, multiple cartilaginous, 287, 288. Eyster, J. A. E., 134, 140, 458, 462.

Face, bones of, Fractures of, P. F. Titterington, 207. Factory problems solved by X-rays, 101. Failla, G., 438, 507. Fallopian tubes, Simplified method of examining patency of, I. Seth Hirsch (abstract), 443.

Faraday, Michael, 13, 24.

Farrell, John T., 439, 504. Fats, ingested, 84.

Fats, ingested, Relationship of gall-bladder empty-ing to, D. N. Silverman and W. Denis, 45. Fay, Temple, 509.

Feldweg, P., 152. Fellows, Haynes H., 170. Ferroux, R., 393, 396, 401.

Fett, 37. Fetus, injury to, by roentgen rays, Unusual case of,
P. Feldweg (abstract), 152.

Fibiger, 392. Fibroids and uterine hemorrhage, Regarding method of choice in treating, C. J. Gauss (abstract), 89.

Fibroids, uterine, Radiation therapy of, P. Strass-

mann (abstract), 264. Figi, F. A., 321, 324, 330. Finsen, Nils R., 434. Fischer (Frankfort), 151. Fishbein, Morris, 155-157. Fisher, A. G. T., 319. Fisk, Eugene Lyman, 153-155.

Fistulæ of ureter cured by termination of kidney function by means of roentgen rays, P. Klein

(abstract), 473. Fittig, 216. Flatau, 406. Flecker, H., 267.

Fleischner, 258. Fluorescent screens, Some physical properties of, F. E. Swindells, 424.

Ford, Frances A., 437, 505.

Forestier, Jacques, 88, 116, 124, 175, 412, 413, 421-423, 481.

Forestier, Jacques, Actual technic of examination of spinal cavities with lipiodol (original paper), 481. See other references.

Forssell, Gösta, 142, 188, 190, 216, 347-352, 434-437, 497-503.

Foster, 313. Foster, 313.
Fractures of bones of face, P. F. Titterington, 207.
Fraenkel, M., 398, 401.
Fraenkel, S., 394, 395, 401.
Fragilitas ossium. See Osteogenesis imperfecta.
Franing, E. C., 440, 505.
Frankfort A/M, University of, Gynecological Insti112

tute, 142. Frankl, O., 394, 395, 4 Franklin Institute, 157. Frankin Institute, 137. von Franque, 147. Freedman, Eugene, 446. Freiberg, Albert H., 315, 319. French Screen Company, 511.

Fricke, 391.

Fricke, 391.
Friedrich, 361.
Friedrich, W., 351.
Fuerer, E., 395, 401.
Fuhs, Herbert, 176.
Furguson, R. H., 159.
Fürst, Walter, 141, 263.
Fürst, Walter, Treatment of malignant diseases of female sexual organs (original paper), 141.
See other reference. See other reference.

Fuso-spirochetal pulmonary gangrene, H. P. Doub,

Gaertner, O., 173, 264. Gafney, George, 210. Gál, Felix, 261.

Gall and gall-bladder diagnosis: critical review of roentgenological diagnosis of gall-bladder disease, I. Seth Hirsch and H. K. Taylor, 37.

Gall-bladder diagnosis, Conclusions based upon routine intravenous administration of sodium tetra-

iodophenolphthalein in, N. B. and E. Newcomer and C. A. Conyers, 56, 67. Gall-bladder disease and X-ray examination of. See under Cholecystography, Graham test, Biliary

Gall-bladder emptying, Relationship of, to ingested fats, D. N. Silverman and W. Denis, 45.

Gall bladder, how affected by pregnancy, 49, 67. Gall-bladder roentgenology, Some pseudo-vesicular shadows and other pitfalls in, J. T. Case, 1. Gall bladder, surgery of, 14. Gall-bladder tests. See Cholecystography and Gra-

ham test.

Gallino, Miranda, M., 413, 421. Gallstones, 4, 14, 16-20, 22, 31, 37, 42, 56, 63, 64, 67, 275, 278, 496.

Gangrene, Fuso-spirochetal pulmonary, H. P. Doub, 333.

Ganzoni-Widmer, 263. Garrison, F. H., 25. Gas insufflation, uterine, 115.

Gassul, R., 239. Gastric symptoms, Interpretation of, C. Bolton (ab-

stract), 269.

Gastric ulcers, Healing of: radiological observations, F. G. Nicholas and A. Moncrieff (abstract), 442.

Gastritis, 277.

Gastro-enterostomy, 346.

Gastro-intestinal roentgen-ray diagnosis, Physostig-mine as aid in, M. Ritvo and S. Weiss (ab-stract), 266.

Gastro-intestinal symptoms, Extra-abdominal affections giving, with special reference to Ménière syndrome, A. W. Crane, 447. Gastro-intestinal tract, roentgen examination of, Use

of amyl nitrite as anti-spasmodic in, G. W. Holmes and R. Dresser (abstract), 280.

Gastro-intestinal tract, X-ray examination of, 250, 253

253.
Gatellier, J., 22, 26.
Gauss, C. J., 89.
Gayet, R., 393, 401.
Geissler, 13, 24.
Gelpi, Maurice J., 403-406, 408.
Gelpi, Maurice J., Review of various methods of treatment of carcinoma of cervix: attendant primary mortality and 5-year cures, 403. See primary mortality and 5-year cures, 403. See other references.

Gelston, C. F., 420.
General Electric Company Research Laboratory, Schenectady, N. Y., 101, 104, 157.
General X-ray Company, 511.
George, A. W., 18, 21, 22, 24-26, 28, 92, 216.
Geraghty, J. T., 26.
Gerber, Isaac, 18, 25.
Geyman, Milton J., Osteochondritis dissecans, 315.
Giesecke, A., 405, 406.
Gilles de la Tourette, 313.
Gilmore, Wilbur H., 439, 506.
Ginsburg, S., 177.

Ginsburg, S., 177.
Glands, ductless, 285, 288.
Glass claimed to be transparent to complete range of sun's spectrum, 225.

Glass, uviol, 261. Glass, vita, 261.

Glass, vita, 261.
Glass, window, transparency of, for ultra-violet rays,
Regarding influence of dust and dirt accumulation under ordinary conditions on, W. Hausing under ordinary conditions on, W mann and O. Krumpel (abstract), 260. Glass, Wood's or Chance's U. V., 443. Glasser, Otto, 87, 255, 391, 503, 509. Glocker, R., 77.

Glucose injections, Observations on radiation therapy in connection with, E. Mühlmann (abstract), 262. [Goiter, exophthalmic] Basedow's disease, Roentgenotherapy of, P. Krause (abstract), 239. Goiter, exophthalmic, Osteoporosis in (editorial), A. B. Moore, 254. Goldsborough, Prof. Francis C., 55. [Concocces pure cultures of Effect of roentgen rays

Gonococci, pure cultures of, Effect of roentgen rays on, A. Cohn and M. Levy-Dorn (abstract), 264. Goodspeed, of Physics Department of University of

Pennsylvania, 16. Pennsylvania, 16.
Goodwin, 313.
Goodwin, P. B., 439, 508.
Gordon, J. K. M., 413, 421.
Gosset, 39.
Gott, Theodor, 134, 140.
Gottheiner (Berlin), 258.
Gottschalk, 216.
von Graff, Erwin, 117, 119, 124.
Graham (Cleveland), 39, 40.
Graham, Evarts A., 7, 11, 22, 24, 26, 28, 39, 42, 44, 45, 56, 66, 91, 127, 133, 253, 271-280, 437. See also Graham test.

also Graham test.

Graham test of gall-bladder function, 1, 3, 6, 7, 22-71, 83, 84, 91-100, 177, 252, 253, 271-280. See also Cholecystography.

Granger, Amédée, 440. Graves, W. P., 405, 406. Gray, Alfred L., 159, 432, 433. Graz, University of, Gynecologic Clinic, 144.

Grebe, L., 264.

Greenbaum, Sigmund S., 260. Greenfield, J. G., 313. Greenough, Robert B., 235, 238, 388, 406. Greenwood, Major, 406.

Gregoire, 116.

Grenz rays. See Borderline rays. Gricouroff, G., 393, 401. Grier, George W., 159, 474.

Hemorrhage,

Grier, G. W., Surface applications of radium (original paper), 474. See other reference.
Grierson, Mrs. E. C., 82.
Griffiths, J., 313.
Grill, C., 414, 421.
Groedel I., 195, 203.
Groedel, Franz M., 134, 139, 194.
Groedel, Franz M., Physiotherapeutics of diseases of cardiovascular system (original paper), 194. See other references. Gros, Edmund, 88. Gruner, 313. Grunmach, 216, 243. von Guericke, 13, 24. Guillain, 481, 486. Gye, 389 Gynecological cases, Choice of treatment in, H. Hirsch (abstract), 170. Gynecology, Diathermy in, 258. [Gynecology] Permanent results in cases of carcinoma of female generative organs following ra-diation therapy, F. Gál (abstract), 261. Habbe, J. E., 89, 90, 140, 170, 172, 174, 176, 177, 263, 265, 266, 280, 358, 360, 443, 445, 446. Haenisch, Fedor, 17, 22, 25, 37. Hague, Omer G., 263. Hahn, 441. Hair pigmentation, Rare, following X-ray treatment, P. Rostock (abstract), 265. P. Rostock (abstract), 205. Halliburton, 467. Hamilton (San Francisco), 87. Hamilton, W. F., 413, 416, 421. Hand, trident, 288. Hanks, Mary E., 439, 505. Hanovia Chemical & Mfg. Co., 511. Hansemann, 233. Hansemann, 253.
Hanson, Malcolm B., 440, 506.
Harris, F. G., 323, 330.
Harris, M. L., 504.
Harsha, W. M., 323, 330.
Haslinger, F., 413-415, 421.
Hassel, 114.
Handel, Mantin, 344, 346, 351. Haudek, Martin, 344-346, 351. Haudek, Martin, Consideration of some changes in diagnostics of stomach diseases in course of two decades (editorial), 344-346. See other reference. Hausmann, W., 260. Hawk, 285. Hayes, Richard, 357, 439, 508. Head, J. R., 415, 421. Healy, William P., 175, 406, 438, 507. Heart, aviator's, 463. Heart disease, balneotherapy for, 194 et seq. Heart experiment, double, Radiation and "automatin" in, H. Zwaardemaker (abstract), 266. Heart, Interesting facts about: with analysis of cases, A. E. Mark (abstract), 89.

Heart. See under Dextrocardia.

Heath, C. W., 254.

Hecht, 427. Hedblom, Carl A., 415, 421, 509. Heddom, Carl A., 415, 421, 509.

Heddom, Carl A., 415, 421, 509.

Heddomer (Pathological Institute, Zurich University), 147.

Heim, Konrad, 445.

Heimann, F., 141.

Heliotherapy, Treatment of tuberculosis by, H. Lo Grasso, 217.

Helmholz, Henry F., 264.

Hemangiomas, extensive, in infants, Radium treatment of, S. Withers and J. R. Ranson (abstract), 265.

Hemorrhage, uterine, 170.

norrhage, uterine, and fibroids, Regarding method of choice in treating, C. J. Gauss (abmethod of choice in t stract), 89. Henderson, W. F., 338. Herendeen, R. E., 438, 507. Hering, D. W., 13, 25. Hering, W., 442. Hermann, H. G., 131. Hertz, 13. Herxheimer, Gotthold, 249. Heuser (Cincinnati), 437, 508. Heuser, C., 191, 193. Heyendahl, P. A., 324, 330. Heymann, J. (Radiumhemmet), 142, 151, 348, 351, 406 (incorrectly spelled Heyman). Hickey, P. M., 178, 193, 252, 409-411, 439, 440, 463-Hickey, P. M., 170, 183, 432, 187, 187, 465, 489, 508, 509.
Hickey, P. M., Radiography of normal larynx (original paper), 409. See other references. Highee, 313. Hill, Henry G., 89. Hill, N. Gray, 443. Hilum, structures of, 460. Hirsch, Henri, 170. Hirsch, I. Seth, 37, 66-68, 161-164, 240, 443. Hirsch, I. Seth, and Taylor, H. K., Gall and gallbladder diagnosis, 37. Hirst, 117, 124. Hoare, E. S., 82. Hodges, Fred, 440, 507. Hodges, Fred M., 159, 439, 508. Hodgson, M. B., 426. Hoke, 242. Hoke, 242.
Holfelder, Hans, 164, 183, 190.
Holland, C. Thurstan, 37, 347, 350, 351.
Holmes, George W., 171, 280, 313.
Holmes, Oliver Wendell, 155.
Holthusen H., 77, 87, 233, 350, 392, 407, 511.
Holzknecht, G., 161-164.
Honeij, James A., 289.
Hopkins, Ralph, Bone changes in leprosy, 470.
Horlick's Malted Milk Corporation, 511.
Hospitals— Hospitals-Adams, J. N., Memorial, Perrysburg, N. Y., 217. Bellevue, New York, 282, 313. Bellevue, New York, 282, 313.
Broca, 115.
Cambridge Maryland, 429.
City, St. Louis, 130, 331.
Huntington, Collis P., Boston, 186.
Lakeside, Cleveland, 22.
Lenox Hill, New York, 271.
Marine No. 66, 472.
Massachusetts General Roston, 186. Massachusetts General, Boston, 186, 235. Memorial, New York, 438.
Mt. Sinai, New York, 117.
Necker, France, 487.
Queen Mary's, for Children, Carshalton, England Queen Mary's, for Children, land, 443.
Woman's, New York, 117, 235.
Howard, J. Campbell, 170.
Howell, William H., 133.
Hubeny, M. J., 159, 451.
Hueper, William, 361.
Hull, A. W., 103, 114.
Hunner, G. L., 117, 124.
Hunt James Ramsay, 449. Hunt, James Ramsay, 449. Hunter, 313. Hurwitz, S. H., 26, 313, Hussey, R. C., 395, 401, Hyde, Clarence L., 508. Hydrotherapy for cardiovascular system, 194 et seq. Hyperchlorhydria, 11.

Hyperthyroidism, Radiation therapy in, Albert Soiland, W. E. Costolow, and O. N. Meland (abstract), 90.

H

Hyperthyroidism, Roentgen therapy in: report of 328 cases of thyrotoxicosis subjected to X-ray treatment, W. H. Meyer (abstract), 179.

Iglauer, S., 409, 415, 421. Ilgin, T. N., 406. Illick, H. E., 271.

Index, histological malignancy, Prognostic value of, and clinical grouping of carcinomata of uterine cervix, Henry Schmitz and William Hueper, 361.

Indiana Roentgen Society, 160.

Infants, extensive hemangiomas in, Radium treatment of, S. Withers and J. R. Ranson (abstract), 265. Ingleside Home, staff, 55.

Insurance for radiologists, 432, 433.

Insurance for radiologists, 432, 433.

International Congress on Radiology, First, London, 1925, 181.

International Congress on Radiology, Second, Stockholm, 1928, 347, 434, 497-503, 505, 510, 511.

International Congress on Radiology, Third, to be in Paris in 1931, 351, 352.

Internist and radiology, J. H. Musser, 250.

Intracranial calcifications, J. T. Murphy, 213.

Intussusception, Roentgenological aspects of, H. E. Ashbury, (abstract), 173

Ashbury (abstract), 173. Iodides in treatment of actinomycosis, 322 et seq. Iodinized oil in diagnosis of pregnancy, H. A. Miller and D. B. Martinez, 191.

Iodipin (Merck), 116.

Iodized oil in experimental injections, 260. Iodized oil injection, Diagnostic use of intra-uterine, combined with X-rays, as compared to per-uterine CO₂ insufflation; study based on 66 cases of tubal obstruction, I. C. Rubin, 115.

Iodized oil. See also Lipiodol. Irgens, Captain of the Stavangerfjord, 347. Iron, X-ray study of, 102 et seq.

Irradiation, brain tumors treated by, 360. Irradiation in stages, W. Altschul (abstract), 100. See also under Radiation, Roentgen Irradiation.

rays, etc. Iselin, Hans, 323, 330. Ishikawa, 370.

Italy, invitation to visit, 84, 85.

Ivy, A. C., 440, 509.

Jaches, Leopold, 128, 133, 350. Jackson, B. H., 159. Jackson, Chevalier, 412, 416, 421.

Jacobæus, H. C., 413, 421.

Jacobi, H., 77. Jacobi, Hans, 280. Jacobi, Hans, 280. Jacobs, Adolph, 406. Janeway, H. H., 406. Jarkowski, J., 489. Jaroschka, K., 444. Jarre, Hans A., 175, 260, 264. Jaundice, 84.

"Jaw, lumpy," 322. Jenkinson, E. L., "Electricity is dangerous" (editorial), 431.
Jensen, 392.
Jensen, V. W., 323, 330.
Jewett, 30.

Jewish Consumptive Relief Society, 134, 139.

Johnson, R. K., 173. Johnston, C. G., 371, 377. Johnston, Zoe Allison, 159.

Joint and bone lesions, Importance of radiographing, C. A. Plume (abstract), 179. Jolly, J., 393, 396, 401.

Jones, 9.
Jones, Henry W., 249.
Jones, Isaac, 448, 449.
Jorstad, Louis H., Burrows, Montrose T., and Ernst, Edwin C., Chemical and biological changes induced by X-rays in body tissues (original paper), 370.

Joseph, 195. Jovin, 399. Joyce, 9. Judd, E. Starr, 186, 190. Juengling, O., 399, 401.

Kaarsberg, J., 323, 330. Kahn, Max, 78-82, 440, 507. Kahn, Max, X-ray treatment of bone tumors, with special reference to tumors of unconfirmed diagnosis (original paper), 78. See other references.

nosis (original paper), 78.
Kallen, Lincoln, 270.
Kaplan, Ira I., 330, 439, 505.
Kappis, M., 315, 319.
Katzman, M., 139.
Katzman, S., 134.
Kaufmann, E., 319.
Kaupp, E., 77.
Kaznelson, 39.
Kearsley switch 465

Kaznelson, 39.
Kearsley switch, 465.
Keen, W. W., 14, 25.
Kehrer, J. K. W., 387.
Kellert (or Keller), E., 397, 401.
Kelley-Koett Mig. Co., Inc., 511.
Kennedy, W. T., 116, 124.
Kernan, John D., 416, 421.
Keysser, Fr., 395-397, 401.
Kidney function, termination of, by means of roentgen rays, On cure of fistulæ of ureter by, P. Klein (abstract), 473.

P. Klein (abstract), 473. Kidney pelvis, Normal, H. J. Polkey (abstract), 359. Kidney, Pneumoradiography of, H. Schilling (abstract), 168.

Kidney, roentgenology of, 3. Kiel Klinic, 236.

Kienbock's disease: report of case, F. W. Van Val-

Kienbock's disease: report of case, F. W. Van Valkenburg (abstract), 173.
Kilfoy, Edward J., 171.
Killian, G., 419, 421.
Kimball, C. P., 394, 395, 401.
Kimbrough, Robert A., 236, 406.
Kingery, L. B., 181, 190.
Kirkbride, T. S., 313.
Kirklin, B. R., 25, 27, 28, 34, 66, 67, 252, 271, 274, 278-280, 443, 508.
Kirklin, B. R., Normal cholecystographic response (original paper), 34. See other references.
Klein, Paul, 473.
Kline, B. S., 333, 337, 338.
Kloevekorn, G. H., 173.
Knaggs, R. Lawford, 282, 284.
Knowles (Colorado), 87.

Knowles (Colorado), 87

Knox, Leila Charlton, Radiosensitivity and tumor

Knox, Leila Charlton, Radiosensitivity and tomorphology, 229, 25, 350, Knox, R., 17, 18, 22, 25, 350, Koenig, Franz, 315. Köhler (or Koehler), Alban, 37, 84, 169, 319. Kohlmann, W., 406. Kok, Fr., 395-397, 399, 401. Kollath, Werner, 172. Kornblum, Karl, 439, 508. Krantz, C. I., 444. Krause, Paul, 239. Kroenig, 405.

Kroenig, 405. Kroenig, 405. Krumbhaar, E. B., 395, 402. Krumpel, O., 260. Küstner, Hans, 266.

504.

Lewis, Philip, 313. Lewis, Bransford, 442. Lewis, George M., 180. Lewis, Sir Thomas, 153.

Liebel-Flarsheim Company, 509.

Lassen (abstract), 265.

Lian, C., 416, 421.

Liechti, Adolf, 280.

Lacassagne, A., 140, 151, 233, 236, 258, 393-402, 407. Lacassagne, A., Direct and indirect action of radiation on cancer tissues (original paper), 393. See other references. Lafferty, Robert H., 451, 464, 465. Lafont, 313. Lahm, 236, 238. Lamb, F. B., 160. Lambert, 313. Lambert, Alexander, 134, 139. Lamps for artificial light treatment, 222, 228, 262, 442. Lancet (London), 155. Lane, C. W., 371, 377. Lane-Claypon, Janet E., 406. Lange, 409. Lange, 409. Langenbuch, 14, 24. Langmuir, 108, 114. Laplane, L., 481. Laqueur, 203, 204. Larimore, J. W., 11. La Roque, 447. Larynx, normal, Radiography of, P. M. Hickey, 409. Larynx, tumors of, 236. Lassen, H. C. A., 265. Lawler, Sister Martha, 472. Lawrence, W. S., 437, 504. Lazarus, Paul, 441. Lead, colloidal, Advanced cancer—experiences in treatment with, A. Soiland, W. E. Costolow, and O. N. Meland (abstract), 265. Lead, colloidal, treatment of tumors, 78, 82, 404, 407. Lead, contoidal, treatment of tumors, 78, 82, 404, 407.
Lecithin, experimental use of, 45.
Legg, A. T., 289, 290.
Legg-Calvé-Perthes' disease (osteochondritis juvenilis deformans coxæ), pathology and pathogenesis of, A. P. Zemansky (abstract), 172.
Le Lorier, 115.
Lenard 13, 24 Lenard, 13, 24. Lenk, R., 413-415, 421. Lenormant, Prof., 188. Lenz, Maurice, 406. Leonard, 16. Leonard, R. D., 21, 22, 26. Leontiasis ossea, 285. Leontiasis ossea, 285.
Lepper, E. H., 394, 401.
Leprosy, Bone changes in, Ralph Hopkins, 470.
Leroux, L., 412, 415, 421.
Leukemia, lymphatic, chronic, Basal metabolism in, C. I. Krantz and M. C. Riddle (abstract), 444.
Levy, R., 323, 330.
Levy-Dorn, Max, 264.
Levyn, Lester, 48, 67, 439.
Levyn, Lester, 48, 67, 439.
Levyn, Lester, Beck, E. C., and Aaron, A. H., Cholegytography in late months of pregnancy (origcystography in late months of pregnancy (original paper), 48, 67. See other references.

LeWald, Leon T., 159, 241, 245, 249, 439, 462-464,

Lichen planus, Local, caused by X-raying lichen planus patient, A. Cedercreutz (abstract), 262. Lichtheim, 216.

Light [mercury vapor lamp] erythema under influence of menstrual cycle and pregnancy, H. Dieterich (abstract), 212.

Light sensitization in ultra-violet spectrum, H. C. A.

Reaction of human skin to repeated exposure to ultra-violet rays—light protection), L. Schall and H. J. Alius (abstract), 267.

Liljestrand, 204.

Lindsay, G. A., 439, 509.

Linser, P., 398, 401.

Lintz, William, 166.

Lip, cancer of, 185, 239.

Lipiodine (Ciba), 116, 489.

[Lipiodol] Bronchography according to passive technic: method of choice for reentgenologist A nic; method of choice for roentgenologist, A. Ochsner, 412-423. Lipiodol, Pneumography by: present uses and limitation, D. C. Smyth and L. A. Schall (abstract), 174 Lipiodol, spinal cavities, Actual technic of examination of, Jacques Forestier, 481. Lipiodol, use of, in cases of pregnancy, 121. Little, 140. Liver, roentgenology of, 5. Fellows, R. C. Stillman, and J. C. Howard (abstract), 170.

Lochte, 242. Lockwood, I. H., 7, 66. Lockwood, I. H., and Skinner, E. H., Cholecystography, 7. Loeb, L., 396, 401, 404. Loeb, L. Farmer, 228. Lo Grasso, Horace, 217-228, 437. Lo Grasso, Horace, Treatment of tuberculosis by heliotherapy, 217. See other reference. Looser, 90. Lorenz, Egon, 503. Lorey (Hamburg), 257, 413-415, 421. Loucks, R. E., 174. Lowey, 39. Lowey, 39. Lubarsch, 235. Ludwik, P., 105. Lukens, R. M., 42 "Lumpy jaw," 322. 421. Lumsden, 392, Lund, University of, 498, 500, 501 [Lungs] Annular shadows, A. S. Anderson (abstract), 172. Lung, carcinoma of (parenchymal type), primary, Roentgenological manifestations of, B. R. Kirk-lin and R. Paterson (abstract), 443. Lung, echinococcous disease of, 258. Lung embolism, Death during roentgen-ray treat-ment because of, E. Saupe (abstract), 357. [Lungs] Fuso-spirochetal pulmonary gangrene, H. P. Doub, 333.
[Lungs] Pulmonary disease in aged, 252.
[Lungs] Silicosis as industrial hazard in Ontario gold mining, O. G. Hague and R. W. McBain (abstract), 263.
Lungs, small, Consideration of high blood pressure due to, W. Lintz (abstract), 166.
Lungs. See also under Chest, Tuberculosis.
Lunn, John R., 313.
Lymphosarcoma, 237. [Lungs] Fuso-spirochetal pulmonary gangrene, H. P. Lymphosarcoma, 237. Lynah, Henry L., 412, 421. Lyon, B. B. Vincent, 275, 279. McBain, R. W., 263. McBurney, 14. MacCallum, 322. MacCarty, W. C., 22, 24, 25, 44, 234, 235, 238, 379,

MacCarty, William Carpenter, Cancer cell in practice of medicine (original paper), 379. See

other references. McCoy, C. C., 13, 39, 67, 68.

Light, ultra-violet, Biology of (Communication IV.-Reaction of human skin to repeated exposure to

McCoy, C. C., Development of roentgenologic examination of biliary tract (original paper), 13.

amination of biliary tract See other references.

McCrae, John, 313.

McCrae, Thomas, 133.

McCraedy, R. L., 118, 124.

McFee, W. D., 348, 349.

McIlhenny, Paul A., 472.

Macintyre, J., 13, 24, 25.

MacKee, George M., 180.

Mackenzie, Hector W. G., 313.

Mackenzie, Stephen, 313.

MacKenzie, W. D., 442.

McLean, 389.

Mackenzie, Stepnen, 313.

MacKenzie, W. D., 442.

McLean, 389.

Macleod, J. J. R., 421.

MacMillan, A. S., 160.

McNalley, F. P., 193.

McNeil, H. L., 23, 26.

McPhedran, F. Maurice, and Weyl, Charles N.,

Value of synchronization in accurate diagnosis
of chest diseases. 458-465. of chest diseases, 458-465.

Maes, Urban, 333, 338.

Magnus, 204.

Magnus, 204.
von Magnus, R., 413, 421.
Maisin, J., 395, 396, 401.
[Malignancy] Clinical remarks on use of surgical diathermy for malignant tumors in anterior air passages, E. Schmiegelow (abstract), 176.
Malignant disease, deep-seated, Further observations

on use of saturation method of radiation in, with some statistics, G. E. Pfahler and B. P. Widmann, 181.

Malignant diseases of eye, ear, nose and throat, Electrothermic methods, roentgen rays, and radium in treatment of, J. T. Stevens (abstract),

Mangnant diseases of female sexual organs, Treatment of, as practised at Gynecologic Institute of Zürich University, Walter Fürst, 141.

Mandelstam, M. E., 240.

Manfred, J., 414, 421.

Marbaix, 456, 457.

Marchand, 246, 249.

Marinesco, 313.

Mark, 102, 114.

Mark, Arthur E., 89.

Markovits. Emmerich, 160. Malignant diseases of female sexual organs, Treat-

Markovits, Emmerich, 169. Marshall, Miss Marie Louise, Librarian Orleans Parish Medical Society, 406.

Martin, C. L., 429. Martin, Franklin H., 353, 504. Martin, Hayes E., 438, 507. Martin, James M., 332.

Martinez, D. B., and Miller, Harold A., Iodinized oil in diagnosis of pregnancy, 191.

Marty, P., 420. Martzloff, Karl H., 235, 238, 388, 405, 406. Martzloff, Karl H., 235, 238, 388, 405, 406. Mason, Max, 438. Mastoid cells, X-ray examination of, 251, 257. Mathews, A., 467, 468. Mathias, 37. Mattson, W. W., 330. May, Ernst A., 439, 505. May, Robert J., 349. Mayer, A., 141, 152, 405, 406. Mayer, Edgar, 437, 508. Mayor, Clinic, 34, 186, 278, 324, 331. Mayo, C. H., 19, 26. Mayo, William J., 353, 447. Mazer, 117, 124. Meaker, Samuel, 117, 124.

Meaker, Samuel, 117, 124.

Measurements, exact anatomical, Importance of, in roentgen therapy, G. H. Schneider (abstract),

Medical Protective Co., 511.

Meek, Walter J., 134, 140, 458, 462. Meland, Orville N., 90, 265. Melchior, Eduard, 323, 330. Melgard, 39.

Melgard,

Meller, 188, 190. Melnes, T. O., 28, 272, 279. Menegaux, G., 188, 190. Ménière's disease, 447 et seq.

Ménière syndrome, Extra-abdominal affections giving gastro-intestinal symptoms, with special reference to, A. W. Crane, 447.

Menstrual cycle and pregnancy, Light erythema under influence of, H. Dieterich (abstract), 212.

Mentzer, S. H., 277-279.

Menville, L. J., 45, 47.

Merrill, A. P., 160.

Metabolism, effect of balneotherapy on, 194 et seq.

Metabolism. See also under Basal metabolism. Metals, radiation from (homogeneous rays) in superficial therapy, Regarding usefulness of characteristic, O. Gaertner and G. H. Kloevekorn (abstract), 173.

(abstract), 173.
von Meyenburg (Pathological Institute, Zurich University), 148, 150, 151.
Meyer, 245, 249.
Meyer, R., 144, 151.
Meyer, William H., 72, 85, 87, 179.
Meyer, William H., and Braestrup, Carl B., Quality determination of roentgen rays (original paper), 72. See other references.

paper), 72. See other references. Meyer, Willy, 416, 421. Middlewest Instrument Co., 511. Miescher, G., 234, 238, 264. Mikulicz, 37.

Mischer, G., 234, 236, 204.
Mikulicz, 37.
Miller, Harold A., and Martinez, D. B., Iodinized oil in diagnosis of pregnancy, 191.
"Miller indices," 102.
Miller, William Snow, 132, 133.
Mills, 216.
Mills, Harlan P., 91.
Miners' Phthisis Bureau of South Africa, 263.
Minot 374

Minot, 374 Mocquot, 116. Moeller, P. F., 413, 421. Moench, G. L., 123. Moenckeberg, J. G., 247, 249. Moncrieff, Alan, 420. 442.

Monod, 151.

Moore, A. B., 254. Moore, Sherwood, 7, 10, 41, 66, 68, 84, 279, 437.

See also Graham test. Moore, Vernor M., 439, 507. Moore, W. F., 421. Morestin, H., 188, 190.

Morning sickness, see Pregnancy, Cholecystography in late months of, Levyn, Beck, and Aaron, 48.

in late months of, Levyn, Beck, and Aar Morris, 389. Morse, 112, 114. Morson, A. C., 394, 402. Morton, Frank R., 504. Morton, J., 394, 396, 401. Morton, William T. A., 353. Moschowitz (or Moschcowitz), A., 317, 319.

Moser, W., 4.
Mostram, J. C., 233, 394, 395, 401, 402.
Mouth and tongue, carcinoma of, Radium treatment of, G. E. Birkett (abstract), 358.
Mouth, malignancies in, 239.

Muenster, University of, 239, Mühlmann, E., 262.

Müller, 108-110, 114. Müller, F., 196, 203. Müller, W., 23, 24, 26. Mulligan, P. B., 159. Murphy, Douglas P., 505.

Murphy, J., 374, 394-397, 401.
Murphy, John T., Intracranial calcifications, 213.
Murray, J. A., 394, 398, 401.
Musser, J. H., 14, 25, 250.
Mutscheller, A., 439, 509.
Myeloma Endothelial (Ewing's tumor), L. K. Sycamore and G. W. Holmes (abstract), 171.
Myelosarcoma, Louis Schultz and E. C. Piette, 490. Myocardial degeneration, 10, 11.

Nagel, M., 243, 247, 249.
Nakahara, W., 395, 401, 402.
Nather, K., 396, 397, 402, 421.
National Aniline & Chemical Co., Inc., 511.
Nauheim, Germany, balneotherapy at, 195.
Navarre, P., 416, 421.
Neill, William, Jr., Pregnancy complicated by carcinoma of uterine cervix, 429.
Nemours-Auguste, 39.
Nesbit, W., 421, 452.
Neurosis, gastric, 277. Neurosis, gastric, 277. New, G. B., 190, 321, 324, 330. New England Roentgen Ray Society, 160. Newcomer, Elizabeth, 56. Newcomer, N. B., 56, 67. Newell, 44. Newell, Q. U., 118, 124. Newell, R. R., 77. Neymann, C. A., 378. Neymann, C. A., 3/8.
"Niche" in gastric ulcer, 442.
Nicholas, F. G., 442.
Nicholas, B. H., 67.
Nicolai, 242.
Nolf, P., 333, 337.
Nollet, Abbé, 13, 24.
Normal persons effects of his Nollet, Abbe, 13, 24.

Normal persons, effects of baths on, 202.

Norris, 236.

Norris, Clarence C., 406.

Norris, George W., 171.

Novak, J., 117.

Novotny, Frank, 89.

Nyswander, R. E., 139.

Oakman, Carl S., 27, 439, 508. Oakman, Carl S., Correlation of cholecystography and barium meal (original paper), 27. See other references. other references.

Obriecht, A. M., 346.
O'Brien, Brian, 218, 224.
O'Brien, F. W., 17, 19, 25.
Ochsner, Alton, 412-423, 452.
Ochsner, Alton, Bronchography according to passive technic; method of choice for roentgenologist, 412-423. See other reference.
Oertiel, terrain-cure of, 194.
Oettinger, 313. Oettinger, 313. Offspring, injury of, by roentgen rays, Experimental investigations regarding, P. Schugt (abstract), 339. Olch, 44. Opie, E. L., 462. Opitz, E., 398, 399, 402. Opter, E., 390, 399, 492. Oppert, 236, 239. Orndoff, B. H., 347, 349, 439, 504. Orndoff, W. R., 26. Osler, Sir William, 14, 131, 133, 156, 447. Osteitis deformans, 281 et seq. Osteitis fibrosa, 281 et seq. Osteoarthropathy, pulmonary, 292. Osteochondritis deformans, 289. Osteochondritis dissecans, Milton J. Geyman, 315. Osteochondritis juvenilis deformans coxæ—Legg-Calvé-Perthes' disease; Pathology and patho-genesis of, A. P. Zemansky (abstract), 172.

Osteochondromata, multiple congenital, 288. Osteochondropathy, 292. Osteodystrophy, juvenile, 286. Osteogenesis imperfecta, 289, 292. Osteomalacia, 281 et seq. Osteomyelitis, 282, 286. Osteoporosis in exophthalmic goiter (editorial), A. B. Moore, 254. Ovarian radiation, problem of, Effect of castration dose of roentgen rays upon rabbit ovary: ex-perimental study with clinical evaluation of, M. R. Robinson (abstract), 140. Ovaries, structure and function of, Investigations regarding effect of graded doses of roentgen rays of different wave lengths on, P. Schugt

(abstract), 268. Owen, E. A., 510, 511.

Pack, George T., 507. Packard, 233, 239, 390. Packard, F. A., 313. Paget, Sir James, 284, 285, 291, 313, 320. Paget's disease, 282 et seq., 320. Palugyay, 233.
Pancoast, Henry K., 360.
Panner, H. J., 315, 316, 319.
Papers, medical, Writing of, Morris Fishbein, 155.
Papoff, 204. Paraffin series, X-ray investigation of, 110. Parathyroids in osteomalacia, 281, 282, 313.
Parkinson, James, 157.
Paterson, Ralston, 443.
Patterson Screen Company, 346, 347, 511. Patterson Scheen Cossi, Pautrier, 262. Payne, 456, 457. Payne, R. A., 249. Pearson, Karl, 390. Peffer, William C., 58.

Pelkan, K. F., 47. Pelvic lesions in female, Cystography as aid to diagnosis of, S. A. Robins (abstract), 172. Penn, Jarrell, 89. Pennsylvania State College School of Chemistry and Physics, 101, 104.

Percy, 403, 404. Permar, H. H., 193. Permar, H. H., 150.
Pernkopf, Eduard, 243, 249.
Perrine, J. O., 426.
Perthes, G., 289.
Perthes' disease, See Osteochronditis deformans.

Peterson, Reuben, 117, 124, 405, 406.
Petit, 468.
Pettit, R. T., 439, 507.
Pfahler, George E., 17-21, 24-26, 28, 37, 181, 216, 349, 351, 439, 479.

Pfahler, George E., and Widmann, Bernard P., Further observations on use of saturation method of radiation therapy in deep-seated malignant disease, with some statistics (original paper), disease, with some statistics (original paper), 181. See other references.

Phemister, D. B., 290, 315, 316, 318, 319, 509.

Philipp virulence test, 144.

Phillips, C. E. S., 13, 25.

Physiotherapeutics of diseases of cardiovascular system, F. M. Groedel, 194.

Physostigmine as aid in gastro-intestinal roentgen-ray diagnosis, M. Ritvo and S. Weiss (abstract), 266.

Picker X-ray Corporation, 511. Piette, E. C., and Schultz, Louis, Myelosarcoma: case report, 490.

Pigmentation and erythema, modification of, by external factors, Investigations regarding, R. Stahl and G. Simsch (abstract), 262. Pilot, I., 333, 337, 338, 439, 504.

Pink, Herman, 160. Pirie, A. H., 348, 416, 421. Platt, H., 290. Plaut, 235, 239. Plume, C. A., 179. Plummer, H. S., 275, 279. Plummer, W. A., 254.

Pneumography by lipiodol: its present uses and limitation, D. C. Smyth and L. A. Schall (ablimitation, D. C. Smyth stract), 174. Pneumoperitoneum, 117, 118. Pneumoradiography of kidney, H. Schilling (re-

viewed), 168.

Viewed), 168.
Pneumothorax, L. R. Sante, 126.
Pneumothorax, bilateral, 127.
Pohle, Ernst A., 77, 85-87, 89, 100, 152, 171-173, 176, 180, 212, 228, 239, 254, 255, 260-268, 280, 314, 339, 357, 360, 439, 442, 444, 446, 473, 509.
Polaryi, 102.
Politzer G. 171, 300

Politzer, G., 171, 390. Polkey, Hugh J., 359. Polyps, nasal, radiation of, 258. Polyps, hasai, fadiation 53, 255, Pommer, 90. Ponfick, E., 321, 331. Pordes, 323, 331. Portis, Sidney A., 440, 508. Portmann, U. V., 85-87, 254, 255, 509.

Postmortem examination in training of roentgenologists, Significance of (editorial), H. E. Robert-

ogists, significance of (ed son, 493-497. Potter, R. P., 439, 504. Potts (1775), 370. Poulton, 456, 457. Pozzi (Hospital Broca), 115.

Pozzi (Hospital Broca), 115.
Pregnancy, Cholecystography in late months of, L. Levyn, E. C. Beck, and A. H. Aaron, 48.
Pregnancy complicated by carcinoma of uterine cervix, William Neill, Jr., 429.
Pregnancy, effect of, on gall bladder, 49, 67.
Pregnancy, Iodinized oil in diagnosis of, H. A. Miller and D. B. Martinez, 191.
Pregnancy, Light erythema under influence of menstrual cycle and, H. Dieterich (abstract), 212.
Pregnancy, lipiodol, injection of, during, 121.
Pregnancy, therapeutic interruption of, by roentgen

Pregnancy, npodoi, injection of, during, 121.

Pregnancy, therapeutic interruption of, by roentgen rays, Regarding, W. Fürst (abstract), 263.

Presser, K., 413, 421.

Pribram, 117.

Prigosen, R. E., 394, 395, 402.

Prime, F., 230, 239, 389, 392, 394-396, 402.

Prince, Morton, 314.

Pritchard, Stuart 413, 416, 421

Pritchard, Stuart, 413, 416, 421. Proetz, A. W., 509. Prostate and bladder, tumors of, radium application, 212.

Prostates and seminal vesicles, Stones in, J. L.

White (abstract), 228. Proust, 236, 405. Proust's clinic, 188. Pseudocoxalgia, 289. Pusey, W. A., 323, 331. Putti, Vittorio, 353. Pylorospasm, 280. Pyuria in childhood, 264.

Queckenstedt, 483. Quick, Douglas, 186, 188, 190, 234, 239, 438, 507. Quimby, Edith H., 438, 507.

R-unit, Absolute measurement of, with large stand-ardization instrument, H. Küstner (abstract), 266.

r-unit, definition of, 510.

Radiation and "automatin" in double heart experi-ment, H. Zwaardemaker (abstract), 266.

[Radiation] Beta rays, Influence of, on carcinoma, L. F. Loeb and Marie Wreschner (abstract), 228.

220. Radiation, biological action of, Mechanical explana-tion of, Samuel Brown, 466. Radiation, Cancer biology and, F. C. Wood, 388. Radiation, Direct and indirect action of, on cancer

tissues, A. Lacassagne, 393. Radiation from metals (homogeneous rays) in superficial therapy, Regarding usefulness of characteristic, O. Gaertner and G. H. Kloevekorn (abstract), 173.

Radiation, scattered, Measurements regarding qual-ity and intensity of, H. Jacobi and A. Liechti (abstract), 280.

Radiation sickness, pathogenesis and therapy of, New investigations regarding, F. Burgheim (abstract), 263.

(abstract), 203.

Radiation therapy in connection with glucose injections, Observations on, E. Mühlmann (abstract), 262.

Radiation therapy in hyperthyroidism, Albert Soiland, W. E. Costolow, and O. N. Meland (abstract), 90.

Radiation therapy, saturation method of, in deep seated malignant disease with some statistics.

saturation therapy, saturation method of, in deep-seated malignant disease, with some statistics, G. E. Pfahler and B. P. Widmann, 181. Radiation therapy of uterine carcinoma, Results of, E. H. Zweifel (abstract), 171. Radiation therapy of uterine fibroids, P. Strass-mann (abstract), 264. Radiographing bone and joint lesions, Importance of, C. A. Plume (abstract), 170.

C. A. Plume (abstract), 179. Radiographscope Co., 511.

Radiography of normal larynx, P. M. Hickey, 409. Radiology, definition of, by Gösta Forssell, 501. Radiology, Internist and, J. H. Musser, 250. Radiology, medical, Education in, with reference

especially to experience gained in Sweden, Gösta Forssell, 497.

Radiology, Section on, American Medical Associa-tion, 159.

Radiosensitivity and tumor morphology, Leila C. Knox, 229.

Radiotherapy in actinomycosis, A. U. Desjardins, 321.

Radium application, rectal, S. Simon (abstract), 212. Radium Institute, Paris, 141, 258, 399. "Radium Spickmethod," 142. Radium, Surface applications of, G. W. Grier, 474.

Radium therapy in cancer, Experimental basis of, S. Russ (abstract), 268.

Radium therapy, Clinical evidence of thyrotoxic control after, R. E. Loucks (abstract), 174.
Radium treatment of carcinoma of mouth and tongue, G. E. Birkett (abstract), 358.

Radium treatment of extensive hemangiomas in infants, S. Withers and J. R. Ranson (abstract), 265.

Radium treatment of malignancy at Gynecologic Institute of Zürich University, 141.

Radium treatment in non-malignant diseases of women, E. R. von Seuffert (abstract), 89. Radiumhemmet, Stockholm, 142, 188, 350, 500, 501.

Radiumhemmet, Stockholm, 172, 165, 567, 568, 688, 888, 888, 239.
Ramrick, R. A., 45, 47.
Randall, L. M., 118, 124.
Rankin, Fred W., 504.
Ranson, John R., 265.
Raulot-Lapointe, Paris, builders of tilting table, 482.
von Recklinghausen, F. D., 286.
von Recklinghausen's disease, 282, 286, et seq.
Rectal radium application. Regarding, S. Simon (ab-

Rectal radium application, Regarding, S. Simon (abstract), 212. Reding, 398, 402.

Regaud, C., 151, 188-190, 233, 234, 236, 239, 258, 350, 358, 396, 398, 401, 474.
Registry of Bone Sarcoma, 292.
Regnault, 468.
Reiley, W. E., 159.
Reimann, 39.
Reinberg, 122, 125.
Reinberg, S. A., 240.
Remer, John, 303, 439, 505.
Renander, Axel, 348.
Revn, Axel, 350.

Reyn, Axel, 350. Rheumatism, balneotherapy for, 195.

Richard, 151

Richtmyer, 85. Rickets, 282, 286-288, 290, 292.

Rickets, fetal, 288. Rickets, heliotherapy for, 217. Riddle, M. C., 444. Rieder, H., 19, 24, 26. Riess, 405.

Rimbaud, G. G., 88. Ringworm, Wood's glass and detection of, by its fluorescent properties, N. G. Hill (abstract),

Ritvo, Max, 266.

Roberts, 39 Robertson, H. E., Significance of postmortem examinations in training of roentgenologists (edi-

nations in training of roentgenologists (editorial), 493-497.

Robin, 468.

Robins, Samuel A., 172.

Robinson, H. C., 272, 279.

Robinson, M. R., 140.

Roentgen biology of normal and diseased skin, G.

Miescher (abstract), 264.

Roentgen diagnostics, speech by G. Forssell, 434, 500. Roentgen examination of gastro-intestinal tract, Use of amyl nitrite as anti-spasmodic in, G. W. Holmes and R. Dresser (abstract), 280.

Roentgen irradiation for actinomycosis, 323 et seq. Roentgen rays, Biological effects of, studied in chicken from ovum to explanted organ, K. Heim (abstract), 445. Roentgen rays of different wave lengths, Investiga-

tions regarding effect of graded doses of, on structure and function of ovaries, P. Schugt (abstract), 268.

Roentgen ray, discovery of, 13, 14.

Roentgen rays, Effect of castration dose of, upon rabbit ovary: experimental study with clinical evalution of problem of ovarian radiation, M. R. Robinson (abstract), 140.

Roentgen rays, Effect of, on pure cultures of gonococci, A. Cohn and M. Levy-Dorn (abstract),

264.

Roentgen rays, Fistulæ of ureter cured by termina-tion of kidney function by means of, P. Klein

(abstract), 473.

Roentgen rays, Increase of resistance to streptococcal sepsis by, in animal experiment, F. Bass and K. Jaroschka (abstract), 444.

Roentgen rays, injury to fetus by, Unusual case of, P. Feldweg (abstract), 152.

Roenigen rays, injury of offspring by, Experimental investigations regarding, P. Schugt (abstract), 330

Roentgen rays on living tissue in vitro, Effect of, R. Gassul (abstract), 239.
Roentgen rays, Quality determination of, W. H. Meyer and C. B. Braestrup, 72.
Roentgen Ray Society of Central Pennsylvania, 159.
Roentgen rays, specific effect of, G. Politzer (abstract), 171.
Roentgen rays, therapeutic intervention of

entgen rays, therapeutic interruption of preg-nancy by, Regarding, W. Fürst (abstract), 263. Roentgen rays,

Roentgen rays in therapeutics, How to make use of best elective effect of, H. Holfelder (re-viewed), 164.

Roentgen-ray apparatus, tests for performance in tropics, 353.

Roentgen-ray cardiograph, S. Katzman, 134.
Roentgen-ray effect on biological object, Regarding point of attack of. Experimental study regarding analysis of phenomenon of effect of roentgen rays upon blood sugar, J. Rother (abstract), 314.

[Roentgen-ray] Irradiation in stages, W. Altschul (abstract), 100.

Roentgen-ray therapy, therapeutic abortion induced by, Report of 31 cases of, Samuel Stern (abstract), 445.

Roentgen-ray treatment, Death during, because of lung embolism, E. Saupe (abstract), 357. Roentgen-ray treatment of malignancy at Gyneco-

logic Institute of Zurich University, 141.

Roentgen therapy in hyperthyroidism: report of 328 cases of thyrotoxicosis subjected to X-ray treatment, W. H. Meyer (abstract), 179.

Roentgen therapy, Importance of exact anatomical measurements in, G. H. Schneider (abstract), 266.

Roentgen unit, Absolute definition of, in Roentgen Institute in Bonn, L. Grebe and O. Gaertner (abstract), 264.

Roentgen unit, standardization of, 351. See also under R-unit.

Roentgen, Wilhelm, 13, 14, 24, 412, 421, 424, 434, 447. Roentgenologists, training of, Significance of post-mortem examinations in (editorial), H. E. Robertson, 493-497.

Roentgenology, handmaid of diagnosis (editorial), E. L. Fisk, 153.

Roentgenology, teaching of, 253.

Roentgentherapy of acne, eczema, and dermomycosis, O. B. Chandler (abstract), 262. Rohdenburg, 392.

Rohitansky-Aschoff sinuses, 42. Rollier, 217, 221. Romig, O. E., 103. Ronayne, Frank J., 257, 354, 490.

Ronayne, Frank J., 257, 35 Rongy, 117. Rose, C. B., 440, 507. Rosenthal, Joseph, 134, 140. Rost, 236, 239. Rostock, P., 265. Rother, J., 314. Rottmann, H. G., 179. Rous, P., 389. Roux-Berger, 151

Roux-Berger, 151. Rovsing, T., 323, 331. Rowntree, L. G., 22, 24, 26. Rowntree, L. S., 412, 422.

Rownfree, L. S., 412, 422. Rubens-Duval, 398. Rubin, I. C., 115. Ruggles, H. E., 135, 313. Rusk, G. Y., 333, 338. Russ, S., 268, 394-397, 401, 402. Rutherford, Sir Ernest, 158.

Rüttenauer, A., 261. Ryan, Eric, 39, 42, 44.

Ryan, E. J., 124.

Sabouraud tablet, Dosage with, from viewpoint of half value layer in aluminum, V. Wucherpfen-

nig (abstract), 360.
Salmond, R. W. A., Observations on movements of duodenal contents, with special reference to anti-peristalsis and pyloric regurgitation, 453.

Saltau, W. D., 406. Samoilov, 242, 249,

Sampson, John A., 118, 124. Samssonow, N., 395, 401. Sante, L. R., 125, 126, 193, 331, 489. Sante, L. R., Pneumothorax (original paper), 126. See other references. See other references.
Sarcoma of bone, 286, 291.
Sarcoma of fascia, 238.
Sarcoma. See under Tumor morphology and radiosensitivity, L. C. Knox.
Sardemann, Emil, 323, 331.
Saturation method in malignant diseases of eye, ear, nose, and throat, 239 Saturation method of radiation therapy in deep-seated malignant disease, Further observations on use of, with some statistics, G. E. Pfahler and B. P. Widmann, 181. Saupe, E., 357. Saville, 114. Schall, L., 267. Schall, Le Roy A., 174. Schauta operation, 405. Scherrer, 114. Scherrer, 114. Scherrer, C. W., 323, 330, 331. Schilling, H., 168. Schinz, H., 258, 396, 397, 402. Schleede, 425. Schmid, 102. Schmiegelow, E., 176. Saturation method of radiation therapy in deep-Schmiegelow, E., 17 Schmincke, 234, 239. 176. Schmitz, Henry, 179, 236, 239, 361, 406, 439, 504. Schmitz, Henry, and Hueper, William, Prognostic value of histological malignancy index and clinical grouping of carcinomata of uterine cervix (original paper), 361. See other references. (original paper), 361. See Schnee baths, 194. Schneider, G. H., 266. Schneider, P., 120, 122, 125. Schober, F., 116, 124. Schoenholz (Düsseldorf), 258. Schott, 195. Schreiner, B. F., 188, 190. Schreus, H., 267. Schugt, P., 268, 339. Schuknecht, P., 426. Schüller, A., 216. 257. Schuknecht, P., 426. Schüller, A., 216, 257. Schultz, Louis, and Piette, E. C., Myelosarcoma: case report, 490. Schumacher, F. L., 159. Schwartz, 233. Schwarz, G., 398, 402. Schweitzer, B., 405, 406. Scott, G. M., 394, 395, 401, 402. Screens fluorescent, Some physical properties of, F. E. Swindells, 424. Scrimger, 313. F. E. Swindells, 424.
Scrimger, 313.
Scudder, 207.
Scurvy, 292.
Sears, W. Gordon, 446.
Seasickness, 449, 450.
Sellheim, 117, 141, 151.
Seminal vesicles and prostates, Stones in, J. L. White (abstract), 228. Senechal, F. A., 82. Serdukoff, 116. Serdukoff, 116.
Sergent, Emile, 414, 421.
von Seuffert, E. Ritter, 89.
Sexual organs, female, Treatment of malignant discases of, as practised at Gynecologic Institute of Zurich University, Walter Fürst, 141.
Sgalitzer, M., 415, 420, 421.
Shapiro, I. J., 333, 337.
Shaw, Arthur B., 357.
Shearer, 109, 110, 114.
Sheldon, F. B., 89, 90, 100, 171, 178, 266.

Sherman, Julius, 178. Sicard, J. A., 116, 124, 175, 412, 422, 481, 485, 489. Siegbahn, Manne, 511. Silicosis as industrial hazard in Ontario gold min-ing, O. G. Hague and R. W. McBain (abstract), 263. 263. Silverman, Daniel N., 45, 66, 67.

Silverman, Daniel N., and Denis, Willy, On relationship of gall-bladder emptying to ingested fats, 45. See other references.

Simmons, C. C., 188, 190.

Simon, S., 212.

Sims, 14.

Simsch, G., 262.

Singer, J. J., 133, 414, 416, 422.

Sisk, J. Newton, 440, 506.

Sistrunk, W. E., 387.

Sittenfield, M. J., 389, 394, 395, 402, 439, 504.

Skin, carcinoma of, 239.

Skin diseases, Regarding treatment of, with Bucky's borderline rays, H. Fuhs (abstract), 176.

Skin diseases, saturation method of radiation used for, 181. for, IRI.

[Skin] Erythema and pigmentation by external factors, Investigations regarding modification of, R. Stahl and G. Simsch (abstract), 262. R. Stani and G. Simsen (abstract), 202.

Skin, human, Reaction of, to repeated exposure to ultra-violet rays—light protection: Communication IV. On biology of ultra-violet light, L. Schall and H. J. Alius (abstract), 267.

Skin, newgrowths of, Treatment of, H. J. Templeton (abstract), 175.

Skin, normal, effect of X-radiation on, 258.

Skin, normal and diseased. Roentgen biology of G. Skin, normal and diseased, Roentgen biology of, G. Miescher (abstract), 264.
 Skin, physiology of, and effects of balneotherapy, 195. Skin. See also under Dermatology.
Skinner, E. H., 7, 21, 26, 66, 348, 349.
Skinner, E. H., and Lockwood, I. H., Cholecystography (original paper), 7. See other references.
Skull changes in bone diseases, 285, 289, 291, 292.
Skull, roentgenologic study of, 496.
Slosse, 398, 402.
Slotopolsky (Zürich), 258.
Sluys, Felix, 159.
Small, J. C., 395, 402.
Smith, C. E., 333, 338.
Smith, G. Elliot, 25.
Smith, Lester A., 357.
Smyth, D. Campbell, 174. Smyth, D. Campbell, 174. Snedden, A. R., 159. Snook, Clyde, 159. Sodium bromide in study of tubal obstruction, 116. Sodium tetraiodophenolphthalein solution for intravenous injection, method of preparing, 58.
Soiland, Albert, 90, 265, 349, 407, 408, 437, 479, 504.
Solomons, Bethel, 119, 125.
Sommerfeld, 441. Soper, George A., 505. Sosman, M. C., 160, 278, 280. Spaulding, 318. Spinal cavities, Actual technic of examination of, with lipiodol, Jacques Forestier, 481.

Spine, Roentgenography of, J. F. Brailsford (abstract), 176.

Spinosheteis broughiel 333 Spirochetosis, bronchial, 333. Spondylolisthesis, Autogenous bone graft in, Fred Spondylolisthesis, Autogenous bone gra H. Albee, 340, Stahl, R., 262, Standard X-ray Company, 511, Starling, E. H., 422, Steel, X-ray inspection of, 101 et seq. Steele, J. D., 313, Stein, Irving F., 118, 124, 509.

Steinberg (Vienna), 150. Steinke, 331.

duodenal, Intermittent, R. Hayes and Stenosis. A. B. Shaw (abstract), 357. Stenstrom, K. Wilhelm, 507.

Sterility, 115. Stern, 258. Stern, Samuel, 429, 445. Steurer (Tübingen), 257.

Stevens, J. Thompson, 239, 440, 504. Stevens, Rollin H., 331. Stevens, William E., 100.

Stewart, George David, 353.
Stewart, W. H., 19, 25, 39, 42, 44, 271, 412, 421.
Stewart, W. H., and Illick, H. E., Plea for standardization of technic in oral method of cholecystography (original paper), 271. See above for other references.
Stillman, Ralph G., 170.
Stitt, E. R., 353.

Stocking, 216. Stockton, Charles G., 44 Stoloff, E. Gordon, 90.

Stomach, carcinoma of, 345.

Stomach, carcinoma of, rupturing through diaphragm, 130. Stomach diseases, diagnostics of, in course of two

decades, Consideration of some changes in, Martin Haudek (editorial), 344-346.

Stomach, diverticulum of, Perforated ulcer simulating, E. Freedman (abstract), 446.
[Stomach] Gastric symptoms, Interpretation of, C.

Bolton (abstract), 269.

Stomach, ulcers of lesser curvature of, Diagnosis and treatment of, H. W. Carson (reviewed),

and treatment of, H. W. Carson (re 167.
Storey, W. M., 440, 508.
Strassmann, Paul, 264.
Strauss, O., 398, 402.
Ström, S., 213, 216.
Stumpf, P., 427.
Sturm, E., 395, 396, 401.
Sugiura, K., 395, 402.
Suhrmann, Rud., 172.
"Sulphur granules of actinomycosis," 322.
Surgery of gall bladder, 14.
Swalm, William A., 279.
Swan-Myers Company, 511.

Swan-Myers Company, 511.
Swan-berg, Harold, 437, 504.
Sweden, Education in medical radiology, with reference especially to experience gained in, Gösta

Forssell, 497. Swindells, Frank E., Some physical properties of fluorescent screens, 424.

Sycamore, Leslie K., 171. Symonds, C. J., 314.

Synchronization in accurate diagnosis of chest dis-eases, Value of, F. M. McPhedran and C. N. Weyl, 458.

Syphilis, 285, 286, 449.

Taft, Robert B., 506. Tait, 14. Tarli, 14.
Tandoja, P., 85, 351.
Tardieu, A., 416, 421.
Taussig, A. S., 139.
Taylor, Lauriston S., 505, 509.
Taylor, Lauriston S., 505, 509.

Templeton, H. J., 175. Teratoma of testicle: diagnosis and treatment, E. J.

Kilfoy (abstract), 171. Terrada, Malter, H., 413, 421. Terrain-cure of Oertel, 194.

Terry, 380, 384. Teschendorf, 257. Testicle, Teratoma of: diagnosis and treatment, E. J.

Kilfoy (abstract), 171.
Theobauld, Walter, 440, 509.
Therapy, Is borderline superior to present superficial? H. Schreus (abstract), 267.
Thomson, 13.

Thost, 409. Thyroid carcinoma, 236.

Thyroid tumors, Bone metastasis in: early diagnosis and radiotherapy, S. Ginsburg (abstract), 177.

Thyrotoxic control after radium therapy, Clinical evidence of, R. E. Loucks (abstract), 174.

Thyrotoxicosis, report of 328 cases of, subjected to X-ray treatment: roentgen therapy in hyperthyrodism, W. H. Meyer (abstract), 179.

Tichomirow, S. A., 420. Tiede, 425.

Tigerstedt, 195, 198.
Titerington, P. F., Fractures of bones of face, 207.
Tongue and mouth, carcinoma of, Radium treatment of, G. E. Birkett (abstract), 358.

Tongue, carcinoma of, saturation method of radiation used for, 186. Trahar, F. C., 249. Trillat, 114.

Tropics, roentgen-ray apparatus tested for use in, 353.

Trostler, I. S., 255-257, 354, 431, 440, 511. Trousseau, 449. Trygger, E., 349.

Tubal insufflation, 115 et seq.

Tubal obstruction, Diagnostic use of intra-uterine iodized oil injection combined with X-rays, compared to peruterine CO₂ insufflation; based on 66 cases of, I. C. Rubin, 115.

Tubby, A. H., 314.

Tuberculosis, differentiation of bronchiectasis from, 413.

"Tuberculosis, hilum," 460. Tuberculosis, Treatment of, by heliotherapy, H. Lo Tuberculosis, T Grasso, 217.

Tuberculosis. See under Pneumothorax.

Tucker, 448. Tucker, Gabriel, 416, 421, 422. Tumors, acoustic, 257.

Tumors of bladder and prostate, radium application,

Tumors, Bone, H. G. Hill and J. Penn (abstract), 89 Tumors, bone, X-ray treatment of, with special reference to tumors of unconfirmed diagnosis,

Max Kahn, 78.

Tumors, bone, See Bone diseases, 281 et seq.

Tumors, brain, Experience in treatment of, by irradiation during past 13 years, H. K. Pancoast (abstract), 360.

Tumor of larynx, 236.
Tumor, liver, of undetermined origin, H. H. Fellows, R. C. Stillman, and J. C. Howard (abstract), 170.

Tumors, malignant, in anterior air passages, clinical reports on use of surgical diathermy for, E. Schmiegelow (abstract), 176.

Tumor morphology, Radiosensitivity and, Leila C. Knox, 229.

Tumors, thyroid, Bone metastasis in: early diagnosis and radiotherapy, S. Ginsburg (abstract),

Ulcer, Duodenal; cholecystitis and gallstones; tuber-culous duodenal ulcer, J. D. Wilkie (reviewed),

Ulcers, gastric, Healing of: radiological observa-tions, F. G. Nicholas and A. Moncrieff (ab-stract), 442.

Ulcers, peptic, duodenal, and gastric, 344. Ulcer, Perforated, simulating diverticulum of stomach, E. Freedman (abstract), 446. Ulcer, pyloric, Diagnosis of, F. Novotny (abstract),

Ulcers, stomach (lesser curvature), Diagnosis and treatment of, H. W. Carson (reviewed), 167. Ulcers, Varicose: comparison of treatment by ultraviolet light and Unna's paste dressings, D. C. Colebrook (abstract), 269.
Ullmann, Henry J., 269, 270, 359.
Ultra-violet light and Unna's paste dressings, Com-

parison of treatment of varicose ulcers by, D. C. Colebrook (abstract), 269.

Ultra-violet light, On biology of (Communication IV.—Reaction of human skin to repeated exposure to ultra-violet rays—light protection). L. Schall and H. J. Alius (abstract), 267.

Ultra-violet measurements with cadmium cell and electrometer, A. Rüttenaur (abstract), 261. Ultra-violet radiation in athletics, Present status

of, W. Hering (abstract), 442.

Ultra-violet rays, transparency of window glass for, Regarding influence of dust and dirt accumulating under ordinary conditions on, W. Hausmann and O. Krumpel (abstract), 260.

Ultra-violet spectrum, On light sensitization in, H.

C. A. Lassen (abstract), 265.

United States Bureau of Standards, 432. United States Government, Watertown Arsenal, X-ray inspection of castings at, 101.

Unna's paste dressings and ultra-violet light, Comparison of treatment of varicose ulcers by, D. C. Colebrook (abstract), 269.

Upsala, University of, 498. Ureter, fistulæ of, cured by termination of kidney function by means of roentgen rays, P. Klein (abstract), 473.

Urinary tract in childhood, Congenital abnormalities of, H. F. Helmholz (abstract), 264.

[Uterus, cervix of] cancer: is outlook better for patient? W. P. Healy (abstract), 175. Uterus, cancer of, Radiation therapy of D. den Hoed

(abstract), 260.

[Uterus, cervix of] carcinoma of, H. Schmitz (abstract), 179.

[Uterus, cervix of] carcinoma of, Pregnancy complicated by, William Neill, Jr., 429.
[Uterus, cervix of] clinical grouping of carcinomata of, Prognostic value of histological malignancy index and, Henry Schmitz and William Hueper, 361.

[Uterus] Fibroids, uterine, Radiation therapy of, P. Strassmann (abstract), 264.

[Uterus] carcinoma, radiation therapy of, Results of, E. H. Zweifel (abstract), 171.
Uterus, X-ray examination of: preliminary report, L. Kallen (abstract), 270.
Uterus. See also under Tubal obstruction, etc.

Van Allen, H. W., 159. Van Nuys, R. G., 177. van't Hoff's law, 468, 469. Van Valkenburg, F. W., 173. Vaquez, H., 242, 249. Vibert, J., 420. Victor X-ray Corporation, 511. Vincent, 416. Vorleander, K., 395-397, 399, 401.

Wachter (Bad-Nauheim), 204. Waite & Bartlett Mfg. Co., 511. Walter, 182.

Walter, O. M., 440, 505. Walthard, 143, 151. Wappler Electric Company, 511. Warburg, 388. Ward, George Gray, 117. Wartenberg, 487. Warthin, A. S., 70. Wartini, A. S., 70.
Wassermann, 404.
Wassilieff, N., 419, 422.
Wasson, W. W., 159, 440, 507.
Waters, bathing and drinking, from European springs, 194, et seq.
Waters, C. A., 208, 313, 412, 422, 504.

Waters, C. A., 208, 313, 412, 422, 504.
Waters position, 257.
Watkins, W. W., 90, 91, 171, 173, 175, 176, 179, 180, 228, 239, 270, 357, 442.
Watkins, W. W., and Mills, H. P., Routine cholecystography, with report of 625 cases (orginal paper), 91. See other references.
Watson, W. T., 314.
Weatherwax, J. L., 439, 509.
Wedd, B. H., 394, 402.
Wegelin (Bern), 150.

Wegelin (Bern), 150. Wegelin (Bern), 150. Weil, 415, 421. Weinberger, M., 242, 249. Weiss, Soma, 266. Wells, H. Gideon, 467. Wertheim, Ernst, 405. Wertheim operation, 404, 405, 407. Wescott, W. C., 133. Wessler, H., 128, 133. Westrgren, 106.

Westrgren, 140. Wever, 114. Weyl, Charles N., 458-465. Weyl pulse relay, 458, 464. Wharton, L. R., 117, 124. Wharton, L. R., 117, 127. Wherry, George, 314. Whitaker, L. R., 11, 28, 84. White, John L., 228. White, J. William, 14, 16, 25.

White, J. William, 14, 16, 25.
Whittaker, J. T., 23, 26.
Whyte, Bruce, 413, 421, 422.
Wickhoff, M., 323, 331.
Widmann, B. P., 181-190, 439, 509.
Widmann, Bernard P., and Pfahler, George E.,
Further observations on use of saturation method of radiation theravy in deep sented policy and produced to the status of the status o od of radiation therapy in deep-seated malignant disease, with some statistics, 181. See other ref-

erences. Wierig, A., 415, 422. Wiesbaden, invitation to visit, 84.

Wight, Otis B., 406. Wilkie, James D., 165. Wilks, 314. Willet, 141, 151. Willett, R. C., 490. Williams, 308, 427.

Williams, Alden, 439, 507. Williams, E. G. C., 440. Williams, F. H., 13, 14, 24, 25, 159.

Williams, F. H., 13, 14, 24, 25, Willis, 249. Wilsey, R. B., 428. Wilson (Univ. of Mich.), 464.

Winiwarter, 14.

Winslow, 39. Winter, 142, 151. Winternitz, 198, 203, 204. Wistar Institute, 375

Withers, Sanford, 265, 480. Wolfers, F., 441. Wood, Francis Carter, 230, 239, 388, 394-397, 402, 406-408, 504.

Wood, Francis Carter, Cancer biology and radiation (original paper), 388. See other references. Wood's glass and detection of ringworm by its fluorescent properties, N. G. Hill (abstract), 443. Wooglom, 398. Wooldridge, 467. Wooley, 315. wootey, 315.
Worder, 405.
Wreschner, Marie, 228.
Wucherpfennig, V., 360.
Wurster, L. E., 159.
Wyckoff, 114.
Wyllie, W. G., 314.
Wyss, 388.

X-rays, Chemical and biological changes induced by, in body tissues, M. T. Burrows, L. H. Jorstad, and E. C. Ernst, 370. X-rays in science and industry, Wheeler P. Davey,

101.

X-ray therapy, Deep, of basal celled epithelioma involving cartilage, H. Flecker (abstract), 267.

X-ray treatment of bone tumors, with special reference to tumors of unconfirmed diagnosis, Max Kahn, 78.

X-ray treatment, Rare hair pigmentation following, P. Rostock (abstract), 265.

X-ray unit, report of international committee, 510. X-ray uterine study, 115. X-rays. See also under Roentgen rays, etc.

Yamagiwa, 370. Yankauer, 412, 422. Young, Hugh, 438.

Zacherl, 144, 151.
Zeisler, Joseph, 323, 331.
Zelenin, 242.
Zemansky, A. P., 172.
Ziegler, E., 314.
Zürich University, Gynecologic Institute, 141.
Zwaardemaker, H., 266.
Zweifel, Erwin H., 171.

X-RAY TECHNICIANS WANTED-We -RAY TECHNICIANS WANTED—We are making a specialty of placing well qualified X-ray and laboratory technicians. Take advantage of a nationally established connection. No registration fee. Write for application form. The Personal Register, 203 Newton Bldg., Saint Paul, Minnesota.

